

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
1 September 2005 (01.09.2005)

PCT

(10) International Publication Number
WO 2005/079595 A1

(51) International Patent Classification⁷: **A23L 1/0522**,
1/09, A23P 1/02, C08B 30/00

(21) International Application Number:
PCT/EP2004/001744

(22) International Filing Date: 19 February 2004 (19.02.2004)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US): **AMY-
LUM EUROPE NV** [BE/BE]; Burchtstraat 10, B-9300
Aalst (BE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **VANHOUTTE,**
Helena [BE/BE]; Burchtstraat 10, B-9300 Aalst (BE).
NEZZAL, Amale [BE/BE]; Burchtstraat 10, B-9300 Aalst
(BE). **MOYSON, Bart** [BE/BE]; Burchtstraat 10, B-9300
Aalst (BE).

(74) Agents: **OSTYN, Frans** et al.; **KOB NV**, President
Kennedypark 31C, B-8500 Kortrijk (BE).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), Euro-
pean (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,
GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: **SPRAY-DRIED STARCH HYDROLYSATE AGGLOMERATE PRODUCT AND METHOD FOR PREPARING A
SPRAY-DRIED STARCH HYDROLYSATE AGGLOMERATE PRODUCT**

(57) Abstract: The invention relates on the one hand to a spray-dried starch hydrolysate agglomerate product having the following properties: a dextrose equivalent (DE) between 5 and 35, a moisture content of < 6% by weight, an unpacked bulk density between 0,4 and 0,6 g/cm³, a compressibility of less than 10%, a particle size distribution whereby less than 5% by weight is bigger than 500 micron and less than 5% by weight is smaller than 53 micron, an average particle size of between 150 - 250 micron, a mechanical stability of > 95%, a static angle of repose (SAOR) of less than 45°, as a measure for flowability; and a dissolution speed of < 180 seconds. On the other hand, the invention relates to a method for preparing a spray-dried starch hydrolysate agglomerate product in a spray-drying tower, comprising spraying a liquid material onto a solid powder material, whereby the liquid material is atomised by means of one or more two-fluid nozzles using a fluid for heating and conveying this material, and whereby the agglomerated spray-dried starch hydrolysate is produced by injecting the solid powder material in the top of the drying tower in such a way that the trajectory of the powder crosses the spray pattern of the atomised liquid material, and wherein the liquid material which is atomised by one or more two-fluid nozzles is a starch hydrolysate solution, whereby this starch hydrolysate solution is atomised using steam as said fluid.



WO 2005/079595 A1